

52



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,280	12/29/2000	John R. Stefanik	00339	8924

26285 7590 05/27/2004

KIRKPATRICK & LOCKHART LLP
535 SMITHFIELD STREET
PITTSBURGH, PA 15222

EXAMINER

YANG, CLARA I

ART UNIT	PAPER NUMBER
----------	--------------

2635

DATE MAILED: 05/27/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,280

Applicant(s)

STEFANIK ET AL.

Examiner

Clara Yang

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 19 April 2004 have been fully considered but they are not persuasive. On pages 5 and 6, the applicants assert that U.S. Patent No. 6,223,348 (Hayes et al.) and U.S. Patent No. 6,603,420 (Lu) fail to teach or suggest all the elements of claims 1 and 7 as amended. However, both Hayes and Lu do teach a remote control device having "a light source in communication with the processor, wherein the light source is one of an incandescent light and a light emitting diode, wherein the motion detector communicates a signal to the processor, wherein the processor effects the light source to be lit upon receipt of the signal."

As shown in Fig. 5a or 5b, remote control 11 of Hayes includes an infrared (IR) light emitting diode (LED) driver, which is connected to microprocessor 26. Though not shown, remote control 11 must include an LED that is driven by IR LED driver such that remote control 11 and an electronic device can engage in two-way communication (see Col. 9, lines 35 - 40).

Likewise, Lu teaches a remote control device, as shown in Fig. 2, having an IR transmitter 220. In Col. 1, lines 48 - 52, Lu teaches that remote control devices transmit IR signals using LEDs; thus it is understood that IR transmitter 220 comprises at least one LED. Again referring to Fig. 2, Lu's IR transmitter 220 is connected to digital signal processor (DSP) 215, which receives motion measurements from motion detection circuitry 200 and outputs a command in accordance with the measurements to IR transmitter 220 (see Col. 3, lines 55 - 67 and Col. 4, lines 1 - 3 and 12 - 16).

Consequently, the examiner maintains the 35 U.S.C. § 103(a) rejection of claims 1 - 9.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 - 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,223,348 (Hayes et al.) in view of U.S. Patent No. 6,603,420 (Lu).

Referring to Claims 1 and 7, Hayes teaches a universal remote control with a reader slot for receiving a smart card (see Abstract). As shown in Fig. 5B, which is the schematic diagram of Fig. 5A with the addition of an infrared (IR) receiver, Hayes's remote control 11 comprises: (a) microprocessor 26; (b) an IR LED driver or transmitter connected to microprocessor 26; (c) IR receiver 37; and (d) smart card connector 12 that enables microprocessor 26 to read from and write to smart card 15 (see Col. 6, lines 27 - 31). Because Hayes specifies that the transmitter is an IR LED driver, the driver must include an LED as a light source. Per Hayes, remote control 11 is able to engage in bi-directional communication with other electronic devices such as a

Art Unit: 2635

cable box, a direct broadcast satellite (DBS) receiver, an Internet access device, etc. (see Col. 9, lines 31 - 40), thus each electronic device must comprise: (e) a transmitter, (f) a receiver, and (g) an electronic program guide (see Col. 9, lines 7 - 10 and 23 - 30). Hayes, however, fails to teach a universal remote control further comprising (1) a motion detector in communication with microprocessor 26 and (2) a directional mode indicator in communication with the processor, wherein the directional mode indicator indicates the operation mode of remote control 11 based on a signal generated by the motion detector.

In an analogous art, Lu teaches a remote control device 100, as shown in Figs. 1 and 2, comprising: (a) a digital signal processor (DSP) 215; (b) an IR transmitter 220, which is understood to include an LED because Lu teaches that remote control devices transmit IR signals using LEDs (see Col. 1, lines 48 - 52); (c) a motion detector formed by ball-shaped weight 205 and stress-sensitive resistive elements 210-1, 210-2, 210-3, and 210-4; and (d) meters 212-1, 212-2, 212-3, and 212-4 (see Col. 3, lines 38 - 54). Because meters 212-*i* (where *i* = 1 - 4) measure the electric current that flows through the corresponding resistive elements 210-*i* and supply these measurements to DSP 215 such that DSP 215 is able to determine if a particular command has been entered by a user moving remote control device 100 in a specified way (see Col. 3, lines 55 - 67 and Col. 4, lines 1 - 3), meters 212-*i* are understood to form a directional mode indicator. Per Lu, if DSP 215 determines from motion detection circuitry 200 that a user is "rolling" remote control device 100 in a clockwise direction in the A-A' plane (i.e., to the right) with sufficient speed, a volume-up command is transmitted to the controlled device. Lu adds that if remote control device 100 is rolled in a counter-clockwise direction in the A-A' plane (i.e., to the left) with sufficient speed, a volume-down command is indicated. Likewise, if remote control device 100 is moved either upward or downward in the B-B' plane with sufficient speed,

Art Unit: 2635

a channel-up or channel-down command is indicated, respectively. (See Col. 4, lines 12 - 42.) Once DSP 215 receives motion measurements from motion detection circuitry 200, it outputs a command in accordance with the measurements to IR transmitter 220, which activates the LED in order to transmit the IR command to the controlled device (see Col. 3, lines 55 - 67 and Col. 4, lines 1 - 3 and 12 - 16).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify remote control 11 of Hayes as taught by Lu because a remote control 11 having a motion detector and a directional mode indicator, such that the directional mode indicator indicates the operation mode of remote control 11 based on a signal generated by the motion detector, enables remote control 11 to generate commands based on a user's movement, thus reducing repetitive stress injury to the remote control and improving convenience for the user (see Lu, Col. 1, lines 19 - 22, 28 - 31, and 60 - 63).

Regarding Claim 2, Hayes imparts smart card 15 has user-specific information and preferences stored in its memory (see Col. 9, lines 7 - 10 and 23 - 30).

Regarding Claim 3, Hayes states that smart card 15 is characterized as a device with a non-volatile memory and a microprocessor (see Col. 1, lines 5 - 17).

Regarding Claim 4, though contactless or hybrid smart cards can be used, Hayes specifies that the preferred embodiment utilizes a contact type smart card (see Col. 1, lines 18 - 30).

Regarding Claims 5 and 9, per Hayes, smart card 15 must be inserted into a reader slot in remote control 11 (see Col. 2, lines 18 - 23 and Col. 5, lines 35 - 46 and 54 - 59).

Regarding Claim 6, Hayes's remote control 11 has an EEPROM 27 (see Fig. 5A) that stores data read from smart card 15 (see Col. 7, lines 4 - 9 and 33 - 48).

Art Unit: 2635

Regarding Claim 8, Hayes's remote control 11 has an IR transmitter and receiver (see Fig. 5B and Col. 9, lines 31 - 35).

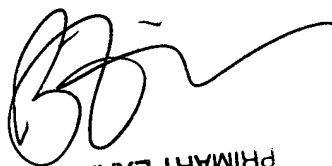
30

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (703) 305-4086. The examiner can normally be reached on 8:30 AM - 7:00 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CY
25 May 2004


BRIAN ZIMMERMAN
PRIMARY EXAMINER